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A Conceptual Model on the Relationships between Business Strategy, Business Model Innovation, Resource Configuration and Performance

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Abstract

The main objective of this study is to develop a research framework for strategic management researchers to develop sound strategic business model innovation that has practical implication on how to innovate firms' business models. The research identifies factors attributing to effective business model: business strategies, type of business model innovations and types of resource configurations. This study framework can guide leaders and managers to acquire the appropriate capability of coping with business model dynamics as well as major transformation that arises from business model innovations. In addition, the study provides insightful contributions in explaining the influence of business strategies (defender, prospector, analyzer) on business model innovations and firm resource configuration, and their influence on business model effectiveness. This study model is valuable considering the limited amount of empirical work previously done on the topic in question. Based on a case-study research survey in seven companies in Indonesia that took place in 2011-2012, we have drawn first conclusions expressed in four research propositions that deem further tests. One case (Food Co.) is highlighted for the description of the study to show some presence and absence of alignment between business strategy, business model innovation, and resource configuration.

Keywords: effective business model, business model innovation, business strategy, defender, prospector, analyzer, resource configuration

Abstrak

Tujuan studi ini adalah mengembangkan rerangka penelitian strategi dan inovasi model bisnis. Riset ini mengidentifikasi faktor-faktor yang mempengaruhi efektivitas model bisnis, yaitu strategi bisnis, tipe

inovasi model bisnis, dan tipe konfigurasi sumber daya. Rerangka studi ini memberi perspektif kepada pemimpin dan manajer dalam bagaimana memperoleh dan membangun kapabilitas yang sesuai untuk menghadapi dinamika model bisnis dan transformasi model bisnis. Studi ini juga berkontribusi dalam menjelaskan pengaruh strategi bisnis (defender, prospector, analyzer) terhadap inovasi model bisnis, konfigurasi sumber daya, dan pengaruhnya pada efektivitas model bisnis. Studi ini penting mengingat masih terbatasnya studi empiris yang melihat keterkaitan strategi bisnis, inovasi model bisnis, konfigurasi sumber daya, dan efektivitas model bisnis. Satu ilustrasi kasuistik (Food Co.) dalam tulisan ini menggambarkan hadirnya dan ketiadaan kesesuaian antara strategi bisnis, inovasi model bisnis, dan konfigurasi sumber daya. Berbasis pada survei riset studi kasus tujuh perusahaan di Indonesia yang dilakukan pada 2011-2012, penulis menyampaikan simpulan-simpulan awal dalam empat proposisi penelitian dan saran kajian lebih lanjut.

Katakunci: efektivitas model bisnis, inovasi model bisnis, strategi bisnis, tipologi strategi bisnis, konfigurasi sumber daya

1. Introduction

Recent developments in the global economy indicated the increasing criticality for firms to innovate their business models. To ensure sufficiency, continuity and sustainability of supply, firms in all industries need to adopt new revenue and cost structures articulated in the business model. A business model is a description of firm mechanisms in creating and delivering value to its customers (Magretta 2002; Shafer, Smith & Linder 2005). Consequently, a Business Model Innovation (abbreviated as BMI) can be defined as implementation of a new mechanism, method or approach in the firm's commercial activities (Gambardella & McGahan, 2009). Hence, a BMI is different with product or technology innovation where transformation of the way a company operates would significantly alter the firm and may even disrupt the industry (Johnson, Christensen & Kagerman 2008).

Examples of successful BMIs are the ones demonstrated by Apple with its iPod and iTunes, Dell with its direct sales system and Amazon.com with the unique value propositions to its customers. In Indonesia, Indofood Group exemplifies a successful BMI when it acquired PT London Sumatra, Tbk. and transformed its oils and fats division to become a key player in Coconut Production Oil (CPO) production. Another example is the BMI conducted by XL Axiata, when it shifted from premium to low price mobile service provider in 2006 and significantly increased its revenue[1]. In the financial services industry, Bank Mandiri issued the e-Toll Card, which provides a new revenue stream as well as enhances value offering to its customers although finally its success is under scrutiny[2]. These examples indicate that transformation of business models are occurring in all types of industries. It is apparent that current conditions in the business environment are motivating firms to reinvent their businesses (McGrath 2011).

Moreover, recent studies have found that product or technology innovation on its own is insufficient to ensure that value creation can be obtained from the particular innovation. Innovation in products and technology also need to include transformation of the firm business model (Chesbrough 2007). A company with a sophisticated product may not be able to generate revenue if the business model design is unable to harness value from it.

[1]Information obtained from XL Axiata CEO presentation in MMUI, June 2011.
[2]Conclusions obtained from the writers' analysis on Bank Mandiri's published information.

In other words, a-state-of-the-art technology may not be worth anything if not supported by a suitable business model design, while a mediocre technology with the right business model may provide significant value (Chesbrough 2009). Successful stories of business model innovation such as demonstrated by Apple or Dell are quite rare. Most firms are still focusing their investments on product or technology innovation. A study conducted by American Management Association found only 10% of innovation investments are allocated to BMI, which indicates that firms are unable to attain growth from BMI (Johnson et al., 2008).

Transformation of the firm business model requires experimentations (Chesbrough 2009) and effective management of the shifts in between as well as within the business model components (Demil & Lecocq 2010). This is particularly of concern for established firms in adopting new business model where the risk of mismanagement may threaten the performance of the existing one (Markides & Charitou 2004).

Considering the criticality for venturing into new business models, there is a pressing need for management to start considering BMI as a means to better compete. However, BMI is not a simple task and remains a significant challenge for practitioners. In adopting BMI as a mode of adaptation, management's decision to pursue the innovation becomes part of the business strategy, or the set of strategic choices defined for the firm to better compete and respond to rivalry (Shapiro 1989). Based on the definition of business strategy as a patterned set of choices to respond to the environmental dynamics (Miles & Snow 1978), the decision of whether a BMI would be pursued, what type and how it would be conducted, will be determined as part of the business strategy.

Hence, a BMI is the strategic outcome given the firm's response towards certain conditions. Further analysis on BMI will need to consider firm's strategies. The conceptual model presented in this article stem from the basic strategic management issue of aligning strategy with structure and processes that makes up the Firm Resource Configuration. Previous Configuration Theories indicated that there is a specific set of strategy-structure-process arrangement that leads to performance (Miller, 1986). This model extends Miles and Snow (1978) typology by focusing on BMI as the mode of adaptation and used BMI effectiveness as the performance measure.

Specifically, firm strategy is decomposed into two elements, namely business state and innovation or the BMI strategy. Moreover, in line with previous Configuration Theories, the model is developed based on the basic premise of internal strategy-process-structure congruence leads to performance. Hence, Effective BMI is attained when there is congruency between Business Strategy, BMI Strategy and Firm Resource Configuration.

2. Literature Review

2.1. Business Strategy and Business Model

Business strategy refers to the way a particular unit competes within a particular industry while a corporate strategy mainly deals with management of a portfolio of business units (Grant 1996).Focus of theis study is business strategy, which will have significant implications on the unit of analysis and observations of the research. A business strategy is “concerned with how business achieves competitive advantage” (Slater & Olson 2001).

A firm's performance is highly influenced by how well its business is running relative to its rivals (Stimpert & Duhaime 1997). Miles & Snow (1978) view strategy as the collection of decisions in which firms resolve the entrepreneurial problem of defining and approaching its product-market domains. On the other hand, Porter (1980) proposed that an entrepreneurial problem is centered on two factors namely how a firm creates value through low cost or differentiation, and how the market coverage scope is defined, focused or market-wide. In short, a business strategy determines how the firm competes.

Business strategy typologies have been developed to offer business strategy prescriptions that ensure performance. One of the most prominent strategy typologies still used today is one developed by Miles & Snow (1978). Miles & Snow (1978) distinguished between four types of business strategy, namely Prospector, Analyzer, Defender and Reactor, also denoted as P-A-D-R Framework. In strategic management, strategy typologies are appropriately used for analysis of organizational configurations that lead to performance (Ketchen, Thomas & Snow 1993). This study will use the Miles and Snow (1978) strategy typology to investigate the relationship between firm resource configuration and BMI.

Miles & Snow (1978) typology is developed based on firms' patterned behavior in responding towards environmental changes. In particular, firms are distinguished based on their behavior throughout the adaptation process, which includes firm resolutions on the entrepreneurial problem, the engineering problem, and the administrative problem (Miles et.al. 1978). The entrepreneurial problem refers to the selection of product-market domain.

The engineering problem is determining the system for implementing the strategic choice on product-market domain selection. The administrative problem involves creating stability in the system while ensuring facilitation of future innovation activities. Each strategy type includes a “configuration of technology, structure and process that is consistent with its market strategy” (Miles et.al. 1978).

There are four types of business strategy according to Miles & Snow's typology. (1) Defender Strategy refers to organizations that attempt to locate and maintain a secure niche in a relatively stable product or service area. It tries to protect its domain by offering higher quality, superior service, lower prices, et cetera. It tends to ignore industry changes that have no direct influence on current areas of operations. (2) Prospector Strategy refers to organizations that value being “first” with new products, market, and technologies even though not all efforts prove to be profitable. Prospectors respond rapidly to early signals concerning areas of opportunity. (3) Analyzer Strategy refers to organizations that are seldom “first” with new products.

However by carefully monitoring the actions of major competitors, analyzers can frequently be “second” with a more cost-efficient, even a more innovative product. (4) Reactor refers to organizations that are usually not as aggressive in maintaining established products and markets as some of its competitors. Rather, reactors respond in those areas where it is forced by environmental pressures. Reactor is categorized as a no-strategy organization.

A firm strategy defines the strategic choices selected to differentiate and to deliver value to its customers and, ultimately, to attain competitive advantage (Porter 1996). Consequently, the firm's business model contains the details of the selected strategic choices. Generally, the choices are usually broken down into two parts.

The first part relates to how firm products are made and the second relates to how the products are delivered to the customers (Magretta 2002). A business model defines mechanisms for the two parts to come together and make up the overall value of the firm (Chesbrough 2007). The defined mechanisms determine firm productivity and, in turn, how to compete among its competitors. Therefore, the business model defines mechanisms for transforming ideas into revenues at affordable costs (Gambardella & McGahan 2009).

Just as chefs use recipes to develop their custom-made dishes, managers use business models as recipes for attaining a desired firm performance (Baden-Fuller & Morgan 2010). Similar to a cooking recipe, managers can refer to a generic set of ingredients that make up a business model to obtain similar outcomes. However, managers need to become like a chef since applying a generic recipe requires creativity and skill to adjust to specific business environment. Ultimately, what differentiates a firm business model is the strategy (Magretta 2002). The differentiations lie in the distinct strategic choices that make up the business model. In short, a business model communicates firm strategy (Shafer et al., 2005).

As the architecture of revenue and cost streams, a business model can be considered to be an articulation of strategy but not the strategy itself (Shafer et al., 2005). For the pursuit of attaining sustainable competitive advantage, a strategy formulation should be equipped with the business model that defines how profit can be generated. Even with a good technology or product, if not supported by a sound business model, a firm will not be able to achieve competitive advantage (Shafer et al., 2005).

On the other hand, a novel business model may convert traditional inputs into high valued outputs. For example, Dell was able to take the lead in the personal computer industry due to its innovative assembling and logistics system. Although others followed to copy Dell's business model, they were not able to attain the competitive advantage as achieved by Dell. Hence, a new business model that is unique and difficult to imitate can become a source of competitive advantage for the firm (Chesbrough 2009). In short, a business model is not equivalent to strategy; it is a complementary to strategy.

Previous studies have offered frameworks for analyzing business models and defined components that make up the business model. Prescribed frameworks have defined distinct sets of business model components based on different perspectives. However, we can observe that there are three common themes included in all of the previously offered frameworks. First theme is a definition of targeted market, value offered to customers and how the value is to be delivered. Amit & Zott (2001) used the term transaction content while Johnson et al., (2008) used customer value proposition and the key resources and processes necessary to deliver the value.

Davenport et al., (2006) differentiated between customer base and customer value proposition. Other frameworks have broken down this component into more detailed elements, such as, the customers, competition, offering and resources elements (Hedman & Kalling 2002) as well as customers, value and resources (Demil & Lecocq 2010). In short, the first element of a business model revolves around a well-defined value offered, delivery method and intended customers to be served. The second theme is a description of the processes and parties involved in delivering value to customers or what Amit & Zott (2001) denoted as structure of transactions. Based on resource-based view Demil & Lecocq (2010) identified activities and organization as the structure that defines the processes of value delivery.

Davenport et al., (2006) used the terms external value chain and internal value chain. Similarly, Hedman & Kalling (2002) further decomposed the element into activities and organization, as well as supply of factor and production inputs. On the other hand, Johnson et al., (2008) simplified the sub-components into key processes, key resources and profit formula. Third theme included in previously offered business model frameworks is the description of management role and legal form, denoted as governance by Amit & Zott (2001).

In the study conducted by Hedman & Kalling (2002), their study concluded the need for including a longitudinal component in a business model as the scope of management in managing the dynamics of the business model elements over time. In addition, the significance of management role in a business model is specifically emphasized by Davenport et al., (2006) business model framework that includes leadership and managerial capabilities, which consists of governance and an enabling capability for continuously sustain and reinvent. A summarized comparison of the various business model frameworks is presented in Table 1.

Table 1. Business Model Frameworks

Common Theme	Amit & Zott (2001)	Hedman & Kalling (2002)	Davenport et al. (2006)	Johnson, et al. (2008)	Demil & Lecoq (2010)
Definition of targeted market, value offered to customers and how value is delivered	Content	Customers	Customer Base	Customer Value Proposition	Customers
		Competition	Customer Value Proposition	Key Resources	Value
		Offering		Key Processes	Resources
		Resources			
Description of the processes and parties involved in delivering prescribed value to customers	Structure	Activities & Organization	Internal Value Chain	Key Resources	Organization
				Key Processes	
		Supply of factor & production inputs	External Value Chain	Profit Formula	
Description of management role and legal form	Governance	Scope of Management (Longitudinal dimension)	Leadership & Managerial Capabilities		

2.2. Business Model Innovation (BMI)

Although coming up with new and unique business models is not an easy matter, firms need to build the capability to innovate their business models (Chesbrough 2009). Business Model Innovation (BMI) can be defined as developing new structures and mechanisms in delivering value to the customers (Gambardella & McGahan 2009; Moore 2004). Considering the elements making up a business model, a business model innovation would constitute a transformation of one or few of the components or a new combination of the components that make up the business model.

Such transformations are those that provide a pathway to competitive advantage (Teece 2009). In other words, innovating the business model means drastically re-arranging how the firm obtains revenue and incurs costs. Here, innovation refers to the transformation of exchange mechanisms and transaction architectures (Amit & Zott 2001). From previous studies, we can conclude that business model innovation becomes inevitable when the firm's core is depleting (Zook 2007; Johnson 2010) and/or the market fails to provide specific products or services efficiently until the appropriate innovation emerges (Johnson et al., 2008).

Hence, business model innovation is not only required when commercializing new product or technology (Chesbrough 2007) but also when existing products in need of substantial growth or acquisition of unchartered territory such as a new market (Johnson 2010). P&G, for example, has been known to move beyond product and service innovations to accommodate the needs of emerging markets. The same product may require the use of different business models in different markets.

To further study the relationship between BMI and organizational adaptation process, distinctions between types of BMI will need to be evaluated Just as any kind of innovation, different transformation arrangements will result in different outcomes. Christensen & Raynor (2003) categorized innovations based on two dimensions. The first dimension is the nature of the innovation and the second dimension is the extent of the impact it has on performance. Similarly, different types of BMI can be defined (see Table 2).

Table 2. Innovation Types (Christensen & Raynor 2003)

Types of Innovation		Description
Sustaining Innovation	Incremental	Extending the customer base by offering better performance
	Significantly Differentiated	Introduction of breakthrough products in the same industry
Disruptive Innovation	Original Market Disruptions	Industry disruption within the existing market
	New Market Disruptions	Industry disruption to the extent of creating new value network

Referring back to its basic definition, an innovation constitutes a significant transformation, which creates both economic and social value (Fontana 2009; De Meyer & Garg 2005). Effective BMIs lead to performance as indicated by the additional value created, both economic and social values, from the implemented transformations. In addition, effective BMI provides entry barriers and creates organization transformations that are not easily imitated (Teece 2009). Hence, effective BMI needs to become the performance output that firms should strive for. Consequently, BMI effectiveness needs to be appropriately conceptualized and measured. Just as other types of innovation, performance attained from effective BMI needs to be reflected in the bottom-line or profitability. To be categorized as effective, a BMI needs to result in above average economic returns.

Therefore, performance reflects effective BMI when positive economic returns are attained, such as indicated by positive or increasing profitability. Furthermore, organizational effectiveness constitutes a broad area of performance measurement domain, which includes both financial and operational indicators as well as other factors deemed to be relevant or appropriately represent the object under study (Venkatraman & Ramanujam 1986). Consequently, BMI effectiveness needs to not only include economic measures but also operational and other related factors appropriate for measurements. Since a BMI constitutes a significant shift in the business model components, additional measurement factors are required to represent the effective transformation of the components. In addition to economic performance, effective BMI must be reflected by transformation of business model components that adhere to the basic principles of value creation.

2.3. Firm Resource Configuration

Based on the strategy process stream of research studies, the emergence of strategy involves a process of formulation followed by implementation (Chakravarthy et al., 2003). Effective strategies involve the establishment of the structure and system, which needs to be in-sync with one another (Galbraith 2002). Studies have shown that the link between strategy and structure is related to efficiency, while the link from structure to strategy is related to managerial cognition skills (Amburgey & Dacin 1994). Hence, any changes in the formulated strategy need to be reflected in the implementation of that strategy through the establishment of the organization structure and processes.

Previous studies on the configuration-performance relationship incorporate internal firm elements, namely structure and process. For this particular research study, we use the term firm resource configuration to further enhance the previous definition of organizational configuration. Organizational configuration refers to a particular arrangement of the strategy, structure and process combination that lead to performance (Miller 1986; Miller & Mintzberg 1983; Mintzberg 1990). The term “firm resource” is to emphasize that the capability developed based on the strategy, structure and process alignment is one of the components of the configuration. Therefore, including the capability component in the discussions allows for a more complete and integrated analysis.

Firm resource can be defined as the firm-specific, hard-to-imitate assets (Teece et al., 1997). Helfat et al., (2007) further expanded this definition to specify firm resource base to include tangible and intangible assets, human resources and capabilities that are completely controlled by the organization. According to them, an organizational capability is the firm's ability to conduct operational activities necessary to convert inputs into outputs. In short, capabilities of the firm are shaped by the processes and the structure in place to manage those processes (Eisenhardt & Martin 2000; Maritan 2007). Hence, firm resource configuration refers to a set of strategy, structure, processes and capabilities arrangement.

Rapid advancements of the business environment have resulted in the significance of embedding innovation in the business strategy. It is critical for a firm to appropriately determine the appropriate approach to innovate. Innovation strategy encompasses strategic decisions related to technological leadership or followership, market positioning and entry timing, as well as new product development scope and speed (Burgelman et al., 2001). In line with strategy formation perspective, innovation strategy needs to incorporate processes and capabilities necessary to carry out the strategy to ensure performance (Birkinsaw & Hansen 2007).

Christensen & Overdorf (2000) conducted a study to identify the determining factors that determine whether companies can overcome challenges arising from innovation. Factors identified are resource, processes and value, which are directly related to firms' organization design. The study concluded that the success of firms in carrying out innovation is determined by the structure of which processes are organized. In particular, the structure should be established to ensure fit between existing and new processes that emerge from the innovation. As a result, the authors prescribed a practical framework for designing an appropriate structure for innovation. By assessing the level of fit between existing and new processes, agility of organization design is determined by the types of team that organize the combination of existing and new processes within the organization or outside of the organization. The design is presented in Table 3.

Table 3. Selecting the Right Structure for Innovation (Christensen & Overdorf 2000)

Type of Innovation	Type of Team	Governance
Fit well with existing values and processes	Functional team or lightweight team	Within existing organization
Fits well with existing values but poorly with existing processes	Heavyweight team	Within existing organization
Fits poorly with existing values but well with existing processes	Heavyweight team	Within existing organization for development, followed by a spin-off for commercialization
Fits poorly with existing processes and values	Heavyweight team	In a separate spin-off

The concept of ambidextrous organization is also appropriate for ensuring resource agility in the organization design. Managing the shifts in the business model require different tasks and speed, hence, require the need to employ different strategies, structures, processes and cultures (O'Reilly & Tushman 2004). An ambidextrous organization includes a tight coordination at the managerial level but organizational separation of units with different processes, structures and cultures. Here, the new business models can be managed without 'contaminating' the existing ones, while at the same time ensure speed and focus of creating value and growth from the new business model.

Another concept that addresses resource agility is Galbraith's (2010) reconfigurable organization. Based on a study of such companies as P&G and IBM, Galbraith (2010) defined a reconfigurable organization to be one that incorporates both stable and dynamic portions, which configures around new opportunities. Industrial competition and business complexities, particularly in large corporations, require a multi-dimensional structure that allows for fluid resource allocation to ensure flexibility and speed in pursuing new opportunities while at the same time appropriately manage existing businesses. The key to value creation in such complex organization design is the capability of managing processes and making choices revolving decision flows, which are capabilities that need to be developed in organization over some period of time (Galbraith 2010).

Focusing on innovation process, Markides & Charitou (2004) distinguished among separation, phased separation, integration and phased integration strategies. In Table 4, it is presented the distinction between types of innovation process is based on two dimensions, namely level of seriousness of conflict as well as level of relatedness between existing and new business models. Various case studies indicate that low strategic relatedness of innovation is executed better using separation or phased separation strategy, while high strategic relatedness is executed better using integration or phased integration strategy.

Table 4. Strategy in Managing Multiple Business Models (Markides & Charitou 2004)

	Low Strategic Relatedness (different market)	**High Strategic Relatedness (similar market)**
Serious Conflict	Separation Strategy	Phased Integration Strategy
Minor Conflict	Phased Separation Strategy	Integration Strategy

Ettlie et al., (1984) specific strategy-structure sequence has a tendency to lead to a certain innovation strategy. Specifically, the focus on technology in the business strategy tends to lead to adoption of radical innovations. However, firms with traditional market-dominated growth strategy tend to pursue incremental innovations. Although the study focuses on process innovations, we expect similar patterns will emerge in other types of innovations. Table 5 summarizes the findings of this study.

Table 5. Strategy-structure Distinctions for Radical and Incremental Innovations (Ettlie et al., 1984)

	Radical Innovation	Incremental Innovation
Strategy	Unique, aggressive technology policy	Traditional, market-dominated growth strategy
Structure	- High concentration of technology specialists - Centralization of decision	- Large, complex, high formalization - Decentralization similar to a bureaucracy (Hatch 2006)

Configuration theories, such as the one prescribed by Miles & Snow (1978), are aimed to not only classify firms but also predict performance outcomes given particular sets of conditions (Ketchen et al., 1993). Internal consistencies between strategy, structure and capabilities form clusters of configurations expected to yield performance (Mintzberg 1979). The performance outcome to be investigated is Effective BMI, which consists of effective BMI content and structure. Therefore, a certain set of structure, process and capabilities is necessary to effectively implement strategy and obtain BMI effectiveness. The set makes up the firm resource configuration that leads to effective BMI.

Configurations of the Defender, Prospector, Analyzer and Reactors are determined based on the distinction between modes of innovation (Pleshko 2006). Defenders are companies that focus on establishing and maintaining a niche in a specific product market, and therefore, would tend to focus on continuous improvements and increasing efficiencies. Prospector refers to innovative companies continuously seeking for new markets. Analyzers are those that adopt the 'second-but-better' strategy to take advantage from being second mover and learning from first movers and the defender-efficiency. Reactors, on the other hand, tend to not adopt a consistent strategy and tend to be more responsive or reactive towards any change in the business environment.

We have used online and paper questionnaires of 159 statements for our preliminary case-study survey research. The survey was followed by in-depth interview to get further insights of the findings. Prior to the fieldwork, a pilot study was conducted to ensure validity and reliability of the research. Pretesting was then directed towards evaluation of face validity, or appropriateness of the English-Indonesian translations of the questionannire. The result of the final survey has been the basis of our analysis in this article. The survey was done on seven companies in Indonesia representing seven industries.

Data has been analyzed using SPSS and Partial Least Squares analysis. We have interviewed seven representatives of the companies for indepth analysis. This article presents our preliminary findings of the case research survey that needs further testing and model development. One case-study here below described one of our illustration on business strategy, business model innovation, and firm resource configuration while giving insigits on how they have affected firm performance.

2.4. Case Study: Food Co.

This section presents discussions on Food Co., a consumer goods company that provides a wide range of food products. Related to discussions in this article, the case study analysis is centered around three areas, namely, Business Strategy (BS), Business Model Innovation Strategy (BMIS) and Firm Resource Configuration (FRC). Inferences and arguments presented in the following sections are based on secondary data analysis as well as brief dicussions with key personnel representing the firm.

2.4.1. About Food Co.

2.4.2. From Prospector and Sustaining Innovations to Defender Configuration and Effective Business Model

Food Co. is a multi-entity corporation that has been in the food and beverage industry in Indonesia for over 30 years. Since its public listing in the early 90's, as a group, Food Co. has attained a total revenue of over Rp30 Trillion in 2009. At the moment, Food Co. is one of the major players in producing a wide range of food items, such as, cooking oil, noodles and snacks. Based on a review of key financial indicators, Food Co. has experienced a steady growth of net sales from Rp1 Trillion in 1993 to over Rp30 Trillion in 2009. However, the group's margin, measured based on percentage of Net Profit After Tax (NPAT) over Net Sales, declined from 12% in 1999 to 5% in 2000, 3% in 2003 and 1% in 2005. Hence, in order to maintain its leading position in the market, Food Co. has to consistently grow and overcome challenges that may threaten its sustainability .

Over the last few years, key business challenges to note are the decrease in consumer buying power and increase in raw material prices. Such challenges have increasingly pressured Food Co. to focus on efficiency and optimize use of resources to reduce or maintain the same level of sales prices. Furthermore, to overcome those challenges Food Co. focuses on maintaining the strength of its brands and maximizing its extensive distribution network. One of the approaches used to leverage from existing brands and distribution network, Food Co. grows through vertical integration.

Recognizing the need to secure sufficient raw material, since late 1990s Food Co. began to acquire plantations and agribusinesses to ensure secured supply of key raw material for the group. Initially, the acquired plantations and agribusinesses are managed at the holding level under the agribusiness division. Eventually, by 2007, Food Co. marked a pivotal point in history as it became one of the leading CPO plantation companies with over 193,000 hectares of planted area.

Beginning in 2005, Food Co. undertook a major transformation in how the corporation was structured. In managing the group, the overall corporate structure is organized based on four main Strategic Business Units (SBUs), namely, Consumer Products, Flour Production, Agribusiness and Distribution. Each SBU is led by a holding company that consists of multiple subsidiaries. Consumer Products unit includes subsidiaries that produces such food products as instant noodles, snack and beverages.

The Flour Production Unit includes companies that operates flour mills as well as produces such food products as pasta and bread. Similarly, the Agribusiness Unit includes plantation companies, refinaries and cooking oil production. Finally, the Distribution unit provides a shared services for the other SBUs.

In addition to the re-grouping of entities under the four SBUs, the corporate structure also include centralized support functions, such as administration, purchasing, marketing and HR. This allows for ease of coordination amongst the SBUs business activities as well as performance monitoring of the entire group. Moreover, as part of the transformation program, Food Co. implemented an Enterprise Resource Planning (ERP) system, which allows for standardized data recording, communications and reporting throughout the group. Therefore, budgeting process can be extensive but at the same time easily consolidated. Ease of consolidation is deemed necessary to ensure efficiency and manage existing brand reputation.

One of the key members of the Board of Directors completed the survey questionnaire. Based on the data analysis, Food Co. is determined to have a configuration that includes Analyzer as its Business Strategy, Sustaining Innovation as its Business Model Innovation (BMI) Strategy, Defender as its Capability Lifecycle (CLC) Path, Defender as its Firm Resource Configuration and Effective Business Model as its performance criteria. The following sections present the supporting facts that can be attributed to each of the configuration component. Such facts are mostly obtained from in-depth interview with the executive who completed the survey.

2.4.3. Food Co's Business Strategy

Food Co. is one of the first major players that provided instant food products at low costs. The Company quickly dominated the market share and has been able to continuously grow and maintain a strong presence in this market. Considering the strength of its positioning in the market, Food Co. has secured a stable domain in the Indonesian consumer products industry. However, the Company realizes that consumers evolve and competitive advantage must be consistently pursued. Food Co. recognizes the increasingly segmented market, which requires them to develop new products in order to serve those newly developed markets.

For example, instant noodles are catered to low-income households, which are provided at low prices and made accessible throughout the country. Distribution network of such products are intricate, since the product has to be available in modern as well as traditional markets. On the other hand, a new market emerged, which are middle to high income consumers who prefers ready-to-eat food products that only requires minimum preparations. Therefore, Food Co. diversifies its products to cater to such market demands. The Company develops food products such as baked products, cup noodles and ready-to-use food seasonings.

Referring back to Miles and Snow (1978), Food Co. can be categorized as Analyzer. It continuously seeks for new growth through development or creation of new markets while at the same time manages a set of stable, core products and markets. The company has broadened its business domain that ranges from consumer products to commodity items. At the same time, its tendency to adopt vertical integration allows for efficiency in managing a large and diverse portfolio of products from crude palm oil to cooking oils and shortenings. In implementing its Analyzer business strategy, Food Co. focuses on the consumers and, particularly, swiftly identifying products that would cater to consumer demands and needs as well as identifying new sources of efficiency improvements. For example, energy costs area is one of the biggest challenges in maintaining productivity. Therefore, Food Co. continuously seeks for new ways to acquire energy at the least cost (efficiency). Vertical integration is one of the initiatives aimed at achieving such performance improvements.

2.4.4. Food Co's BMI Strategy

Although the Company does not adopt a specific set of standardized innovation process, Food Co. management cultivates innovative practices at each SBU. In particular, management identified three key areas of innovation: (1) market development; (2) process and technology; (3) cost efficiency. The Company is very cost conscious considering the raising prices of production inputs, such as, energy. Therefore, the Company promotes innovation activities that centered around increasing efficiency. Through the use of technology and process innovations, the Company strives for maintaining and increasing efficiency to ensure sustainable competitive advantage.

At the moment, they have not formally keep track of the innovation activities that have occured. However, their innovations focus on resources attached to a specific unit and based on the location or product advantage attained by that unit. At each unit, a specific team of management develop its own innovations aimed at attaining the lowest costs. For example, one unit may be succesful in establishing a new way to convert waste into energy, which significantly reduces its energy costs. In another unit, a key innovation may be to acquire alliances with farmers that will supply agricultural products to the unit. The alliance alters the business model, where the unit closely coordinated the farmers to plant a particular variant in order to produce items that adhere to specific requirements. This not only secures the sourcing of raw materials but also allows for standardized raw material through integration of the unit activities starting from all the way at the planting stage.

Furthermore, centralized management of key functions allows for coordinated and closely monitored innovation activities. Any type of innovation initiated by each unit needs to be approved by the Holding company. Therefore, the Company is able to synergize its innovation efforts towards one particular direction, which is to attain competitiveness through cost effectiveness and efficiencies. In addition to product innovations, the Company focuses on internal continuous improvements throughout its value chain and promote synergies in-between SBUs.

2.4.5. Food Co's Firm Resource Configuration

Despite the adopted Analyzer, Food Co. is configured similar to a Defender. This requires flexibility embedded in the organization design, which comes at a high cost and needs to be traded off by the efficiency that the organization can achieve. Based on the analysis of the corporate structure, the Company adopts a centralized system attributed by a Defender. Opposite to the Prospector Configuration, Defender Configuration focuses on cost-efficient processes and tends to adopt vertical integration. Moreover, structure of a Defender is, among others, aimed at centralized control, intensive planning, functional structure as well as tendency to focus on production and finance (Miles et al., 1978).

Furthermore, Food Co. tends to integrate or gradually integrate new business processes into the existing operations. This is indicated by its tendency to grow through vertical integration as well as the application of centralized control mechanisms embedded in its administrative system. Such innovation processes are suitable for Sustaining Innovations, which are innovations that expand the customer base or introduce a breakthrough product in the same industry (Christensen & Raynor 2003). Innovations that result in incremental improvements do not create serious conflicts with existing operations, and, therefore, can be managed simultaneously within current business structure (Markides & Charitou 2004).

According to Configuration Theories (Rumelt 1974; Hambrick 1983), a specific combination of strategy, structure and process that aligns the firm with the external environment leads to performance. Harmonization between external and internal elements is a key ability necessary for a firm to attain competitive advantage (Mintzberg 1983). Therefore, a mis-alignment may result in ineffectiveness or low performance. However, in this particular case, Food Co. adopts a Prospector Business Strategy while at the same time tends to use Sustaining BMI strategy and configures its firm resources as Defender, yet indicate high performance over the last few years. Based on the overall growth of revenue and profitability levels, this firm is able to effectively manage transformations that occured in its business model indicated by its economic performance.

3. Conceptual Framework

3.1. Business Strategy, Firm Resource Configuration, Business Model Innovation, and Effective Business Model

The Miles and Snow's (1978) typology defines four types of business strategies. The typology has been based on the pattern of strategic actions in adapting to environmental changes. This study only includes three of the four business strategies, which are Defenders, Prospectors and Analyzers. Reactors is excluded in this study given that it is considered to be a "residual strategy" when the other three strategies are not implemented properly (Miles et al., 1978). In accordance with the prescribed typology, it is expected that different types of business strategy necessitate the adoption of certain firm resource configuration.

In distinguishing between firm configurations, Miles & Snow (1978) addressed the adaptive cycle and organizational problems that arise throughout the cycle. The distinction between strategy types is defined based on how firms address those problems. Miles & Snow (1978) distinguished between different approaches in how firms address entrepreneurial problems as the first characteristic of distinction. Based on the perspective of how an organization responds to the changing environment, an entrepreneurial problem constitutes a clear definition of business domain (Miles et al., 1978). Defenders are firms that focused on a specific business domain. Prospectors are expected to be in the opposite spectrum and define a broad domain. In turn, Analyzers fall in between the two extremes as ilustrated in

Figure 1. Strategy Focus and Business Domain Definition

A defending strategy (defender) is one that focused on a specific business domain, while a prospecting strategy (prospector) entails the selection of a broad domain. Analyzers strategy, or denoted here as balancing strategy, would include adopting both focused and broad domain. Consequently, in accordance with configuration theories, each type of strategy works effectively with certain structure and process conditions. Throughout the adaptive cycle, in addition to the entrepreneurial problem, firms must also address the engineering and administrative problem, which leads to how process and structure are defined. Therefore, engineering and administrative problems, particularly how firms address such problems, lead to the organization design.

The Miles & Snow business strategy typology defines strategic management choices to better compete in the related industry. In line with organizational configuration theories, the prescribed choices entail decisions on firm resource configuration that will shape firm behavior and, in turn, impact performance. Strategy defines the direction of the firm and specifies product offering, target market, and value offered (Galbraith 2002). Considering that a business model communicates strategy, firm resource configuration needs to go hand-in-hand with the business model. Therefore, the firm resource configuration must be equipped with the capabilities necessary to operate the prescribed business model.

In organization design, the main concern is on managing tradeoffs, where flexibility comes at a cost (Galbraith 2002). Miles & Snow's typology defines firm types based on the extremes of the trade offs, where Defenders are on one side, Prospectors are on the other and Analyzers are somewhere in between. Strategy employed becomes the determining factor in selecting which trade off to make, particularly in the trade off between flexibility and efficiency, as illustrated in Figure 2.

Figure 2. Strategy Focus and Organization Design Trade-Offs

The focus of the study is to investigate the attainment of effective business model given a particular configuration of strategy and firm resources. Here, effective business model is used as a performance indicator of the implementation of business strategy and business model innovation. A business model design entails the strategic decisions related to the allocation and management of resources to attain profits. Thus, firm resource configuration is a reflection of strategy as well as the consequence of the business model design, which articulates the implemented strategy. In other words, in addition to reflecting strategy, firm resource configuration must be appropriate to manage the BMI that takes place.

The firm resource configuration needs to encompass the necessary configuration to accommodate innovations, specifically, BMI. In general, an innovation process, or value chain, consists of idea generation, conversion and diffusion (Birkinsaw & Hansen 2007). A BMI process can be characterized similarly based on the generation-conversion-diffusion chain. Just as other types of innovations, idea generation in BMI involves coming up with a creative, hard-to-imitate, business model design. The BMI conversion stage entails experimentations necessary to appropriately transform the firm business model in accordance with the design generated. Furthermore, a BMI may or may not involve a new product development. Simultaneous to the business model experimentations, the conversion stage is where product development is finalized.

Finally, the BMI diffusion is the stage where the overall business model transformation has been applied and it has provided the firm with commercial benefits, both from the transformation of business model elements as well as from the product launched if a new product is involved. One of the key barriers to BMI is the conflicts that arise between the new and existing business models (Chesbrough 2009). Similar to the necessity of adopting the right organization configuration to ensure effectiveness in implementing business strategy and attain performance, implementation of innovation requires appropriate structure and processes.

Effectiveness in properly managing the arising conflicts through the structure and processes employed yields to performance. Markides & Charitou (2004) found that when new business model has high strategic relatedness with existing business, use of integration or phased integration innovation processes would be most effective. On the other hand, low strategic relatedness between new and existing business models requires the use of phased separation in innovation process.

In addition to evaluation of the required resources, determining an effective innovation structure requires an examination of the firm values as well as processes necessary for innovation implementation (Christensen & Overdorf 2000). Values refer to a broader definition to include standards used in prioritizing which new business to pursue and become a determining factor for determining the innovation structure. Particularly, the study found two sets of values, namely rules on the acceptable gross margins expected of the new business and the rules on the significance of investment necessary to pursue the new business.

The innovation structure refers to the how the innovation implementation is managed to include the types of dedicated teams assigned to carry out the innovation efforts and whether the team operates within or outside existing organization. Consequently, different types of business strategy will require adopting different innovation process to address conflicts arising from new and existing business models. Defenders adapt through changes in the environment by securing their positioning in a specific market.

Emphasis on defending strategy is expected to further improve efficiency at the cost of flexibility through centralization and strict control. This type of organization is equivalent to Mintzberg's (1980) definition of machine organization that emphasizes on standardization of work processes and limited horizontal decentralization. Firms that focus on efficiency will tend to adopt mechanistic structure that emphasizes on cost controls and standard procedures (Miller 1986).

Table 6. Defender Configuration

Strategy Focus	Process (Miles et al., 1978)	Structure (Miles et al., 1978)	Innovation Process (Markides & Charitou 2004)	Innovation Structure (Christensen & Overdorf 2000)
Defending	• Cost –efficient, single core technology • Vertical integration • Maintain efficiency	• Financial and production experts • Intensive planning • Functional structure, highly divisionalized • Centralized control • Hierarchical • Rewards system • Focus on production and finance	Integration; OR Phased Integration	Lightweight Team; within organization OR Heavyweight team; within organization

Therefore, Defender Configuration encompasses a mechanistic structure and similar characteristics as a machine organization.As prescribed by Miles & Snow (1978), Defenders tend to create stability and develop a niche for a set of products and customers. Therefore, Defenders will resort to BMIs with high strategic relatedness to be properly managed within existing organization. This is in-line with Defenders' focus on efficiency. Therefore, either integration or phased integration process will most likely be selected. In addition, strategic relatedness indicates that Defenders will tend to adopt new businesses with values that fit with existing business. Christensen & Overdorm (2000) prescribed the appropriate innovation structure is to manage implementation team within the organization. The Defender Configuration is presented in Table 6.

Prospectors are prescribed to be most oriented towards innovation to promote growth (Pleshko 2006). Hence, such firms are expected to trade off efficiency with flexibility to ensure consistency with its prospecting strategy. Mintzberg (1980) denoted this type of configuration as innovative organization, which placed more emphasis on mutual adjustment coordination mechanisms and selected decentralization. Organic structure rather than mechanistic would likely be utilized to accommodate the flexibility and speed necessary to accommodate the prospecting strategy (Miller 1986). The Prospector Configuration is one that focuses on flexibility to ensure timely response to changes in the environment.

Prospectors are not afraid to pursue innovations that may not entirely be in-line with the existing operations and values. In fact, since Prospectors tend to focus on creating new products and markets, it is likely that Prospectors will pursue new businesses with low strategic relatedness with existing business. Consequently, values of the new business are not likely to fit well with existing operations. Therefore, such firms require the use of phased separation or separation innovation process that is managed externally from the existing business as illustrated in Table 7. This will ensure Prospectors to maintain flexibility in responding to the market as well as avoid and manage conflicts that may arise.

Table 7. Prospector Configuration

Strategy Focus	Process (Miles et al., 1978)	Structure (Miles et al., 1978)	Innovation Process (Markides & Charitou 2004)	Innovation Structure (Christensen & Overdorf 2000)
Prospecting	• Flexible, multiple technologies • Low routinization	• Marketing and R&D experts • Extensive and diverse expertise • Production structure with low formalization • Decentralized control • Focus on coordination mechanisms • Rewards system focus on marketing and R&D	Phased Separation; OR Separation	Heavyweight team; towards spin off OR Heavyweight team outside organization

Analyzers are firms that focus on balancing strategy and, therefore, will not necessarily demonstrate consistency towards efficiency or flexibility. Such firms will have a tendency to attempt maintaining appropriate proportions between mechanistic and organic structure. In addition, it is expected that Analyzers may not demonstrate consistency in implementing a particular innovation process and structure. The process and structure arrangement of this type of firm will be denoted as Analyzer Configuration whcih can be ilustrated in Table 8.

Table 8. Analyzer Configuration

Strategy Focus	Process (Miles et al., 1978)	Structure (Miles et al., 1978)	Innovation Process (Markides & Charitou 2004)	Innovation Structure (Christensen & Overdorf 2000)
Balancing (Analyzer)	• Duel technological core • Large and influential applied engineering group • Moderate degree of technical rationality	• Marketing and Engineering dominance • Intensive planning for stable portion and comprehensive planning for new products • Loose matrix structure • Moderately centralized control • Complex coordination mechanism • Reward system based on both effectiveness and efficiency	Integration OR Phased Integration OR Phased Separation; OR Separation	Lightweight Team; within organization OR Heavyweight team; within organization OR Heavyweight team; towards spin off OR Heavyweight team outside organization

The defined Defender Configuration, Prospector Configuration and Analyzer Configuration are theoretical configurations expected to yield performance. Firm's effective resource configuration must be a function of firm's business strategy. Defender business strategy guides the firm to adopt defender resource configuration. Prospector business strategy guides the firm to adopt prospector resource configuration. Analyzer business strategy guides the firm to adopt analyzer resource configuration.

As previously discussed, performance is indicated by the level of business model effectiveness that firms conducted. Firm performance is influenced by good alignment between business strategy, business model innovation, and firm resource configuration. The first proposition mentioned below implies the firm's requirement to satisfy aligned configuration, e.g., Prospector Business Strategy with Prospector Resource Configuration, Defender Business Strategy with Defender Resource Configuration, and Analyzer Business Strategy with Analyzer Resource Configuration.

Proposition 1: The more aligned the business strategy with theoretical firm resource configuration, the more effective the business model.

The alignment predicts the business model effectiveness within the context of the implementation of business model innovations (sustaining innovation, disruptive innovation) that will be discussed further in Propositions 2-4. Effective business model can be measured based on a set of criteria that makes up the BMI. Based on the business model framework developed by Amit & Zott (2001) as well as by Johnson et al., (2008), we can define effective business model content and effective business model structure. Business model content includes transformation of value proposition and the method of delivery employed (Amit & Zott 2001). Business model structure refers to the parties involved and processes employed to deliver value. Business model content can be evaluated based on three variables, which are, customer base, job-to-be-done and offering. Hence, effective business model can be measured based on each of the variables as summarized in the Table 9.

Table 9. Definition of Effective BMI Content

	Component	Effective Content is one that…
1	Customer	Significantly altered the customer base we previously targeted
2	Job to be done	Introduces a new goods/services to provide a solution to an important problem or designed to fulfill specific needs of customers
3	Offering	Involves a new good/service that provides a new offering or a new method of delivery of our goods/services

Source: Adopted from Johnson et al., (2008).

Similarly, we can evaluate business model structure based on four variables, namely, key resources, key processes, reconfigurability and profit formula. In defining structure, the key resources refer to the internal and external parties involved in the value delivery process, while key processes encompass the mechanisms employed to deliver value. Moreover, The concept of ambidextrous organization satisfies the agility requirement for managing the business model dynamics. The reconfigurable organization structure is a concrete form of an ambidextrous organization. Agility provided by the fixed and variable components will ensure proper management of business model dynamics. Effective business model structure can be defined based on each of the variables as summarized in the Table 10.

Table 10. Definition of Effective BMI Structure

	Component	Effective BMI Structure is one that…
1	Key Resources	Appropriately acquired resources namely, talents, technology, equipment, information, and brand new channels, new partnerships or alliances
2	Key Processes	Result in the execution of all transactions and exchanges within the value chain in accordance with the performance measures, and established new standards for goods/services delivery in the value chain as well as new exchange mechanisms
3	Reconfigurability	Adopts an organization structure that consists of functional divisions that serve as the home base for all employees and cross-unit teams configured to cater to specific products, segments, channels, and customers
4	Profit Formula	Resulted in acceptable prices of our products by the customers, efficient costs of production to allow for acquisition of higher level of margins, sales volume that met and/or exceeded the economies of scale

Source: Adopted from Johnson et al., (2008) and Galbraith (2000).

Considering that effective business model creates value, economic performance can be used to evaluate the extent of value created from the implemented BMI. In particular, economic performance can be evaluated using two sets of measures, namely sales and profitability. Effective business model is one that reframes customer value proposition and provides a new offering. Specifically, an innovation is deemed effective if Customer Perceived Value at least matches and ideally exceeds firm's Customer Value Proposition (Fontana 2009). Such circumstances will be indicated by sales (actual) exceeding sales target. In addition, an effective business model is the attainment of competitive advantage indicated by the increase of sales compared with competitors.

Profitability can be used to evaluate effectiveness by looking at the margins obtained due to the implemented BMI. In general, profitability is based on the difference between value creation (that incurs costs) and value generation (that implies revenue), where the higher the difference the better the firm performance. However, in the event of an effective business model, the difference between revenue and costs need to indicate the attainment of new level of margins that have never been obtained prior to the innovation. In addition to profitability, an indicator of an effective business model is the sales volume that meets or even exceeds the level of scale necessary to ensure desirable returns on the investment made for the innovation (Johnson et al., 2008). Therefore, the economic performance of a BMI can be evaluated using such financial ratio as Returns on Investments (ROI).

3.2. BMI Strategy, Business Strategy and Firm Resource Configuration

Miles & Snow (1978) defined business strategy types based on patterns of firm choices in reacting towards environmental changes. As a set of choices on how the firm responds to environmental conditions, a strategy defines what distinguished the adopted business model to outperform competitors. Therefore, the pattern of choices determines the decision to innovate the business model and how the transformation should takes place. Distinct decision patterns that make up the business strategy may result in different patterns of decisions related to how a BMI is implemented. In other words, different business strategies may choose to adopt different types of BMI.

The study conducted by Ettlie et al., (1984) found that a specific set of strategy and firm configuration can predict whether the firm will adopt a particular type of innovation. In particular, firms that focus on market dominations in its growth strategy tend to pursue incremental innovations while firms that focuses on aggressive technology policy tend to adopt radical innovation. Here, the differences between radical innovations and incremental innovations are the inclusion of new technology as well as the magnitude of costs incurred and changes that occurred, supported by Dewar & Dutton (1986). They found that different organizational attributes predict the adoption of incremental and radical innovations. From these studies we can infer that different organization configurations relate to different types of innovation.

Incremental innovations provide evolutionary changes to respond to market dynamics, which is equivalent to Christensen's (1997) definition of sustaining innovations. Similarly, radical innovations are expected to provide revolutionary changes with the use of a disruptive technology previously unavailable, which Christensen (1997) denoted as disruptive innovations. Both types of innovations necessitate development of new capabilities embedded in firm's structure and processes (Christensen & Overdorf 2000).

Sustaining innovations fit well with values of existing organization while disruptive innovations do not. Hence, adoption of a particular type of innovation requires the use of an innovation structure that is appropriate to roll out the innovation. For this particular study, we focus on BMI types and firm configurations that are required to execute the transformation. Therefore, equivalent to the innovation categories defined by previous studies, we identified two types of BMI, as presented in Table 11.

Table 11. BMI Types

Types of Innovation (Ettlie et al., 1984)	Types of Innovation (Christensen & Raynor 2003)	BMI Type Descriptions
Incremental Innovations	Sustaining Innovations	Sustaining BMI: incremental improvements on existing products or development of new, better performing products
Radical Innovations	Disruptive Innovations	Changing BMI: radical transformation to disrupt existing markets with existing products or creation of new markets with new products

Therefore, we can infer that there is a patterned set of business strategy, BMI strategy and firm resource configuration. An innovation strategy encompasses strategic decisions related to technological leadership or followership, market positioning and entry timing, as well as new product development scope and speed (Burgelman et al., 2001). A BMI strategy is the strategic decision related to transformation of one or multiple business model components aimed at creating value and outperform competitors. In line with strategy formation perspective, innovation strategy needs to incorporate processes and capabilities necessary to carry out the strategy to ensure performance (Birkinsaw & Hansen 2007). Just as a business strategy requires proper firm configuration to ensure effective implementation, the formulated BMI Strategy requires specific sets of innovation structure and processes.

Moreover, previous studies indicate that a particular type of firms have the tendency to pursue a specific type of innovation. Given a particular business strategy, firms are expected to select a certain strategic choice related to how they need to transform their business models. If a firm's business strategy encompasses a pattern of choices in reacting towards environmental dynamics, it is expected that the adopted BMI strategy would be in congruence with the pattern of decisions making up the business strategy. As BMI strategy determines the firm configuration necessary for innovation, for any type of business strategy, a BMI strategy would influence the firm resource configuration. Hence, BMI strategy effects the direction, or moderates, the relationship between business strategy and firm resource configuration.

Proposition 2: The more firm's tendency to pursue Sustaining BMI moderates the relationship between Defender Strategy and Defender Resource Configuration.

In distinguishing between incremental and radical innovations, Ettlie et al., (1984) identified the strategy-structure pattern likely to adopt a certain type of innovations. The strategy-structure sequence predicted to adopt incremental innovation in market dominated growth strategy followed by an organization structure similar to a bureaucracy, with high complexity, formalization and centralization (Hatch 2006). Such characteristics share many similarities with Defenders who tend to focus on strict control.

Therefore, we can infer that Defenders are expected to adopt Sustaining BMI. Consequently, Sustaining BMI would affect the firm resource configuration towards Defender Configuration. Hence, Sustaining BMI strategy would reinforce firms that adopt Defending Strategy to also adopt Defender Configuration.
Ettlie et al., (1984) determined that the strategy-structure sequence leading to radical innovations is the focus on aggressive technology policy and the existence of extensive pool of technical experts. Such characteristics are equivalent to Prospectors who tend to aggressively identify opportunities to exploit new product and market. Therefore, Prospectors will have a tendency to pursue disruptive BMI. A disruptive BMI is one that significantly alters the industry structure. To effectively execute the innovations, Prospectors should adopt Prospector Configuration. Similar to the influence of Sustaining BMI strategy on Defending Strategy, Disruptive BMI strategy reinforces the relationship between Prospecting Strategy and Prospector Configuration.
Proposition 3: The more firm's tendency to pursue Disruptive BMI moderates the relationship between Prospector Strategy and Prospector Resource Configuration.

Analyzers have an innate characteristic to balance between pursuing new opportunities and maintaining core operations. Unlike Prospectors that focus on innovations, Analyzers will practice more prudence in their innovation efforts and invest conservatively to innovation initiatives. In addition, similar to Defender, Analyzers maintain a stable domain, which focuses on efficiency, and at the same time do some innovations to promote effectiveness. Analyzers are expected to balance between pursuing disruptive as well as sustaining BMI, where the strategic choice to roll out sustaining or disruptive BMI depends on the costs associated with each endeavor. Hence, the BMI Strategy adopted by Analyzers is denoted as Combined BMI Strategy to include both Sustaining BMI and Disruptive BMI.
Proposition 4: The more firm's tendency to pursue Combined BMI moderates the relationship between Analyzer Strategy and Analyzer Resource Configuration.

Table 12 summarizes the inferences made on business model innovation strategy for each type of business strategy based on previous theories.

Table 12. Inferences on BMI Types Based on Previous Theories

	Defender	Prospector	Analyzer
Business Strategy (Miles & Snow 1978)	Focused Domain	Broad domain	Balancing between focused and broad domains
Innovation Strategy (Ettlie, Bridges, O'Keefe 1984)	Growth through market domination	Aggressive technology policy, extensive knowledge resource	Incorporate both market domination and intensive technology policy in promoting growth
Structure (Ettlie, Bridges, O'Keefe 1984)	Traditional structure with strict control, commonly found in bureaucracies	Unique structure with high concentration of technical experts	Balancing between strict control (efficiency) and unique structure (effectiveness)
Type of Innovation (Ettlie, Bridges, O'Keefe 1984; Christensen 1995)	Incremental to Sustaining Innovations	Radical to Disruptive Innovations	Both Incremental-Sustaining and Radical-Disruptive Innovations
BMI Strategy	Sustaining BMI	Changing BMI	Combined Strategy (Both Sustaining and Changing BMI)

A moderator can be defined as "a variable effecting the direction and/or strength of the relation between an independent or predictor variable and a dependent or criterion variable" (Baron & Kenny 1986). Defining BMI strategy as moderator implies that the interaction between business and BMI strategies provide significant relationship to the firm resource configuration. Moreover, the use of BMI strategy as moderator is especially appropriate for this study considering that part of the investigation is to observe consistency in the relationship between Business Strategy and Firm Resource Configuration. In addition, the use of a moderator can facilitate identification of a mediator (Baron & Kenny 1986). Therefore, in our analysis, the use of BMI Strategy as moderator allows for gaining more insights in the Business Strategy and Firm Resource Configuration relationship by identifying other mediating variable as ilustrated in Figure 3.

Figure 3. BMI Strategy as Moderator
Source: Adopted from Baron and Kenny (1986)

4. Concluding Remarks

A business strategy encompasses a set of strategic decisions in attaining performance and to better compete in the market (Slater & Olson 2001; Stimpert & Duhaime 1997). Miles & Snow (1978) defines business strategy as a set of choices in defining business domains, which is denoted as the entrepreneurial problem. In addition, the Miles & Snow typology defines how to construct structure and processes, or resolve administrative and engineering problems, given a particular type of business strategy. As a set of choices to respond to environmental changes, the business strategy also needs to address the pre-conditioning factors where a business model innovation is inevitable. In other words, the firm's business strategy determines the strategic decisions to innovate the business model.

Based on its basic definition, an innovation constitutes creation of value through attainment of above average returns and growth (Schumpeter 1934). In general, an innovation strategy consists of strategic decisions related with technological leadership, positioning and product development (Burgelman et al., 2001). Similarly, a business model innovation strategy constitutes the strategic decisions related to initiating a BMI in the pursuit of leadership, positioning and growth. Since the Miles & Snow typology represents firm types based on patterns of adaptation to the market dynamics, it is expected that the business model innovation strategy reflect the adopted pattern. Particularly, we can infer that business model innovation strategy represents the pattern of decisions for the firm to respond to the environmental dynamics by deciding on a particular transformation of its business model. The set of strategic choices that determine the pursuit of a business model innovation and the execution of the innovation make up the business model innovation strategy.

A business model innovation involves redefining one of the firm's business model components or a combination of several transformations (Moore 2004). A business model innovation may involve product, technology, or process innovations that alters the way the firm creates and delivers value to its customers (Teece 2009; Amit & Zott 2001). Just as other types of innovations, a business model innovation is deemed effective if it creates value that not only includes wealth generation and growth (Ireland et al., 2003) for the companies and the shareholders but also include better value to customers and society as a whole (Fontana 2009).

Based on the four propositions aforementioned, further research need be doing to test the relationships and the effects of business strategies, business model innovations, business model effectiveness, and firm performance in general. Researchers must define carefully the research contexts. Besides doing exploratory research to test the model in different industries, explanatory research must be done in particular industries or firms that are dominant in defender, prospector, and analyzer strategies. First of all, researchers must group sample firms or cases according to the type of business strategy adopted. The model must be tested based on the premises that business strategy adopted guides the adoption of business model innovation type and firm resource configuration type. The alignment of the three elements adopted predicts the business model effectiveness or the firm performance as a whole.

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